

What is claimed is:

1 1. A light emitting apparatus, comprising:
2 a light emitting element of nitride semiconductor;
3 a phosphor that absorbs light emitted from said light
4 emitting element and emits light with a wavelength different
5 from that of the absorbed light;
6 a first reflection mirror that reflects the light emitted
7 from said light emitting element to converge the light;
8 a second reflection mirror that has a light passing hole
9 at a position on which the light reflected on said first
10 reflection mirror is converged and that has a reflection surface
11 on the side opposite to the side facing said first reflection
12 mirror; and
13 a phosphor layer that includes said phosphor, said
14 phosphor layer being placed over said light passing hole and
15 at a specific region in transparent resin that part of light
16 passing through said light passing hole is radiated.

1 2. The light emitting apparatus according to claim 1,
2 wherein:
3 said first reflection mirror has a ring-shaped concave
4 to converge the light, and
5 said light passing hole has a shape such that the light
6 reflected on the ring-shaped concave is converged while having
7 a ring shape.

1 3. The light emitting apparatus according to claim 1,
2 wherein:

3 said phosphor layer has a thickness in the light emission
4 direction, said thickness being capable of being adjusted
5 according to the color of light to be extracted from said light
6 emitting apparatus.

1 4. The light emitting apparatus according to claim 1,
2 wherein:

3 said phosphor layer includes said phosphor the
4 concentration of which is capable of being adjusted according
5 to the color of light to be extracted from said light emitting
6 apparatus.

1 5. A light emitting apparatus, comprising:

2 a light emitting element of nitride semiconductor;

3 a phosphor that absorbs light emitted from said light
4 emitting element and emits light with a wavelength different
5 from that of the absorbed light;

6 a first reflection mirror that reflects the light emitted
7 from said light emitting element;

8 a lens for converging the light reflected on said first
9 reflection mirror;

10 a second reflection mirror that has a light passing hole
11 at a position on which the light is converged by said lens and
12 that has a reflection surface on the side opposite to the side
13 facing said lens; and

14 a phosphor layer that includes said phosphor, said
15 phosphor layer being placed over said light passing hole and
16 at a specific region in transparent resin that part of light
17 passing through said light passing hole is radiated.

1 6. The light emitting apparatus according to claim 5,
2 wherein:

3 said phosphor layer has a thickness in the light emission
4 direction, said thickness being capable of being adjusted
5 according to the color of light to be extracted from said light
6 emitting apparatus.

1 7. The light emitting apparatus according to claim 5,
2 wherein:

3 said phosphor layer includes said phosphor the
4 concentration of which is capable of being adjusted according
5 to the color of light to be extracted from said light emitting
6 apparatus.

1 8. A light emitting apparatus, comprising:

2 a light emitting element of nitride semiconductor;

3 a phosphor that absorbs light emitted from said light
4 emitting element and emits light with a wavelength different
5 from that of the absorbed light;

6 a plurality of first reflection mirrors that reflect the
7 light emitted from said light emitting element to converge the
8 light on positions different from one another;

9 a second reflection mirror that has a plurality of light
10 passing holes at said light converging positions and that has
11 a reflection surface on the side opposite to the side facing
12 said first reflection mirror; and

13 a plurality of phosphor layers that include said phosphor,
14 said phosphor layers being placed over said light passing holes

15 and at specific regions in transparent resin that part of light
16 passing through said light passing holes is radiated.

1 9. The light emitting apparatus according to claim 8,
2 wherein:

3 said plurality of first reflection mirrors are each
4 placed equally divided into four on the same circumference while
5 each having a concave to converge the light.

1 10. The light emitting apparatus according to claim 8,
2 wherein:

3 said plurality of phosphor layers have the same form and
4 are placed at the same level.

1 11. The light emitting apparatus according to claim 8,
2 wherein:

3 said plurality of phosphor layers have a thickness in the
4 light emission direction, said thickness being capable of being
5 adjusted according to the color of light to be extracted from
6 said light emitting apparatus.

1 12. The light emitting apparatus according to claim 8,
2 wherein:

3 said plurality of phosphor layers include said phosphor
4 the concentration of which is capable of being adjusted
5 according to the color of light to be extracted from said light
6 emitting apparatus.

1 13. A light emitting apparatus, comprising:

2 a light emitting element of nitride semiconductor;
3 a phosphor that absorbs light emitted from said light
4 emitting element and emits light with a wavelength different
5 from that of the absorbed light;

6 a plurality of reflection mirrors that reflect the light
7 emitted from said light emitting element to converge the light;

8 a plate member on which said light emitting element is
9 mounted and which has a plurality of light passing holes
10 provided corresponding to positions where the light reflected
11 on said plurality of reflection mirrors is converged;

12 a pair of lead electrodes that are placed on said plate
13 member while being divided into two, said lead electrodes being
14 connected with bonding wires for supplying power to said light
15 emitting element; and

16 a plurality of phosphor layers that include said phosphor,
17 said phosphor layers being placed over said light passing holes
18 and at specific regions in transparent resin that part of light
19 passing through said light passing holes is radiated.

1 14. The light emitting apparatus according to claim 13,
2 wherein:

3 said plurality of reflection mirrors are each placed
4 equally divided into four on the same circumference while each
5 having a concave to converge the light.

1 15. The light emitting apparatus according to claim 13,
2 wherein:

3 said pair of lead electrodes serves a second reflection
4 mirror that reflects the light reflected on said phosphor layers

5 again in the direction of emission observation surface.

1 16. The light emitting apparatus according to claim 13,
2 wherein:

3 said plurality of phosphor layers have the same form and
4 are placed at the same level.

1 17. The light emitting apparatus according to claim 13,
2 wherein:

3 said plurality of phosphor layers have a thickness in the
4 light emission direction, said thickness being capable of being
5 adjusted according to the color of light to be extracted from
6 said light emitting apparatus.

1 18. The light emitting apparatus according to claim 13,
2 wherein:

3 said plurality of phosphor layers include said phosphor
4 the concentration of which is capable of being adjusted
5 according to the color of light to be extracted from said light
6 emitting apparatus.

1 19. A light emitting apparatus, comprising:

2 a light emitting element of nitride semiconductor;
3 a phosphor that absorbs light emitted from said light
4 emitting element and emits light with a wavelength different
5 from that of the absorbed light;

6 a converging member that converges the light emitted from
7 said light emitting element on a convergence region in the
8 direction of emission observation surface;

9 transparent resin that is molded such that said phosphor
10 is located at said convergence region; and
11 a reflection mirror that reflects the light reflected on
12 said phosphor again in the direction of emission observation
13 surface.